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| EXAMINER |
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CHANKONG, DOHM

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| ART UNIT | PAPER NUMBER |
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2452

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09/16/2010

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

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| <b>Office Action Summary</b> | <b>Application No.</b><br>10/665,536 | <b>Applicant(s)</b><br>MOTOYAMA, TETSURO |  |
|                              | <b>Examiner</b><br>DOHM CHANKONG     | <b>Art Unit</b><br>2452                  |  |

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period **will** apply and **will** expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply **will**, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 27 May 2010.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-7, 11, 21-25 and 29-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7, 11, 21-25 and 29-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>1/7/2010, 3/5/2010, 5/12/2010, and 5/27/2010</u> .            | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

This non-final rejection is in response to Applicant's request for continued examination. Applicant amends claims 1, 11, 21, 25, 29, 30, previously cancelled claims 8-10, 12-20, and 26-28, and adds claims 31 and 32. Accordingly, Applicant presents claims 1-7, 11, 21-25, and 29-32 for further examination.

#### **I. CONTINUED EXAMINATION UNDER 37 CFR 1.114**

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/7/2010 has been entered.

#### **II. INFORMATION DISCLOSURE STATEMENT**

The examiner has considered the information disclosure statements filed on 1/7/2010, 3/5/2010, 5/12/2010, and 5/27/2010.

#### **III. TERMINAL DISCLAIMER**

The terminal disclaimer filed on 12/10/2009 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of U.S. Patent No. 7,293,081 has been reviewed and is accepted. The terminal disclaimer has been recorded.

#### **IV. RESPONSE TO ARGUMENTS**

In Applicant's response filed on 12/10/2009, Applicant amends the independent claims to include one substantially new limitation: the first device information includes at least two of static, semi-static, and dynamic states of the image printing device. The other amendments merely clarify what was already implied from the claim language: that the first monitoring computer periodically obtains first device information from an image printing device and processes stored information of the image printing devices. Applicant also argues that the cited references fail to disclose the processing and transmitting steps as claimed. Applicant's arguments are not persuasive for the following reasons.

##### **A. Applicant's amendment does not overcome the *Fan* reference.**

The new limitation reciting that the first device information includes at least two of static, semi-static, and dynamic states of the image printing device is merely a broader version of the previous limitation which recited that the information included status information and identification of the printing device. According to Applicant's specification, static state data is data that does not change such as a device's model or serial number while dynamic state data is data that dynamically changes such as a device's operating parameters [Applicant's printed publication 20040068549, 0057] and

The previous iteration of the claim recited that the device information included status information and identification of the image printing device. "Status information" of the printing device reads on Applicant's now claimed dynamic state while "identification of the image printing device" reads on the now claimed static state. The previous rejection relied on column

4, line 63 to column 5, line 14 to teach the “status information” and implicitly teach “identification of the image printing device.”

Therefore, this rejection relies on *Fan* to teach the now claimed dynamic state and the static state for the reasons set forth in the previous rejection with respect to “status information” and “identification.”

**B. *Fan* and *White* disclose the processing and transmitting steps as claimed.**

Applicant argues that *Fan* and *White* do not disclose:

1. processing, by the first monitoring computer, stored information of the plurality of image printing devices monitored by the first monitoring computer to generate second device information that includes status information of each of the plurality of image printing devices; and
2. transmitting the second device information using a second Internet protocol from the first monitoring computer to a second computer that is connected to the network of the plurality of image printing devices.

The combination of *Fan* and *White* disclose both of these limitations.

1. *Fan* discloses a first monitoring computer processing stored information of a single image printing device to generate second device information that includes status information of one image printing device while *White* discloses processing stored information of multiple image printing devices.

*Fan* discloses a supervisor computer that receives status information from a printer [Fig. 3]. *Fan*'s supervisor computer reads on the claimed first monitoring computer. *Fan*'s supervisor computer then transmits second device information to a client. However, *Fan* does not disclose that the supervisor computer monitors a plurality of printers.

*White* discloses monitoring multiple printers and collecting the status information of the multiple printers into a single message to be sent [*White*, column 8 «lines 40-60»: the resource collector within the collection server collects and collates printer usage information]. The

rejection therefore proposes modifying *Fan*'s printer management system so that it can monitor a plurality of printers and collect/collate the status information of all printers into a single message.

2. *Fan* discloses transmitting second device information to a second computer while *White* discloses that the second device information includes status information of the plurality of image printing devices.

The previous rejection relied on both *Fan* and *White* to teach the transmitting step. *Fan* discloses transmitting second device information to a client computer but does not disclose using a second Internet protocol and that the second device information includes status information from a plurality of printers. *White* teaches both of these missing features.

As discussed in the previous sub-section, *White* discloses monitoring a plurality of computers and collating the monitored information into a single message. This feature reads on the second device information. Additionally, *White* discloses monitoring information accessed using a browser by end users on the same network as the printers [*White*, column 9 «lines 14-20»]. Using a browser suggests the use of an Internet protocol.

Thus, the rejection proposes modifying *Fan*'s printer management system to include a collated message that includes status information from a plurality of printers as well as using a client browser to access the collated information.

### **C. Conclusion**

For the foregoing reasons, Applicant's amendment does not overcome the cited prior art references and Applicant's arguments are not persuasive. The rejection as set forth in the previous action are therefore maintained. The new limitations are further addressed the claim mapping in the following section.

**V. CLAIM REJECTIONS - 35 USC § 103**

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
  2. Ascertaining the differences between the prior art and the claims at issue.
  3. Resolving the level of ordinary skill in the pertinent art.
  4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- A. Claims 1, 3, 4, 6, 7, 11, 21, 22, 24, 25, and 29-32 are rejected under 35 U.S.C §103(a) as being unpatentable over *Fan* et al, U.S Patent No. 6.310.692 [*“Fan”*], in view of *White* et al, U.S. Patent No. 6.952.726 [*“White”*].**

In the following claim mapping, all citations are to *Fan* unless otherwise noted.

**Claims 1 and 11**

As to claim 1, *Fan* as modified by *White* discloses a method of monitoring a plurality of image printing devices communicatively coupled to a network [column 3 «line 67»], comprising:  
periodically obtaining, from an image printing device by a first monitoring computer using a first Internet protocol over the network, first device information of the image printing device, the first device information including at least two of static, semi-static, and dynamic states of the image printing device [See response to arguments | Figure 3 «items 250, 248» where : *Fan*’s server reads on claimed first monitoring computer and *Fan*’s printer reads on claimed

Art Unit: 2452

first device | column 4 «line 63» to column 5 «line 14». *Fan* does not expressly disclose that the printer has sensors but this function is implied by the fact that the printer provides resource information to the first computer. *Fan*'s printer resource level and printer name read on claimed dynamic and static state, respectively. *Fan* does not expressly disclose that the device ID is included in the device information but this feature is implied by the fact that printer names are displayed on a GUI of status information (Fig. 5: disclosing a GUI that includes printer names)];

storing, by the first monitoring computer, the obtained first device information into an information storage [column 5 «lines 15-18»];

processing, by the first monitoring computer [Fig. 3 «item 246»: supervisor computer], stored information of the plurality of image printing devices monitored by the first monitoring device to generate second device information that includes status information of each of the plurality of image printing devices [column 5 «lines 1-26»: printer sends information to a supervisor computer which sends information to the clients & *White*, column 2 «lines 63-67» | column 7 «lines 22-30» | column 8 «lines 40-60»: the resource collector within the collection server collects and collates printer usage information]; and

transmitting the second device information using a second Internet protocol from the first monitoring computer to a second computer that is connected to the network of the plurality of image printing devices [Figures 10-12 | column 4 «lines 11-14»: transmitting the notification to the client computer | column 5 «lines 45-59»: email or paging | *White*, column 9 «lines 14-20»: monitoring information accessed using a browser by end users on the same network as the printers];



wherein the first monitoring computer is remote from the plurality of image printing devices, and the first monitoring computer is the first computer to obtain the first device information from the plurality of image printing devices [Figure 3 «items 248, 250»].

As indicated in the foregoing mapping, while *Fan* discloses processing stored information of a single image printing device, *Fan* does not expressly disclose processing stored information of a plurality of image printing devices to generate second device information that includes status information of each of the plurality of image printing devices. However, this feature was well known in the art at the time of Applicant's invention as evidenced by *White*.

It should first be noted that *Fan* does disclose generating device information from stored information of single image printing device [column 5 «lines 45-59»] but does not indicate doing so from a plurality of image printing devices. In the same field of invention, *White* is directed to a system for monitoring resource usage in a network system. Specifically, *White* is directed at solving the problem where data from printers “must be collected from each printer server or printer individually and by hand, and the data from individual printers *must then be collated and merged by hand to provide an overview of printer use* in, for example, a department or corporation” [column 1 «lines 57-60»].

As cited in the foregoing claim mapping, *White* solves this problem by introducing a collection server which stores usage information from a plurality of image printing devices and subsequently generating device information that includes status information from each of the plurality of image printing devices. It would have been obvious to one of ordinary skill in the art to have modified *Fan*'s remote monitoring system to include the ability to collect and collate usage information from a plurality of printers as taught by *White*. Such a modification improves

*Fan's* system because it would allow the automatic collection and merging of printer status/usage information [*White*, column 1 «lines 56-60»].

As to claim 11, as it does not teach or further define over previously claimed limitations, it is similarly rejected for at least the same reasons set forth for claim 1.

### **Claims 3 and 23**

As to claim 3, *Fan* discloses the first Internet protocol and the second Internet protocol are different Internet protocols [Figures 10-12 | column 4 «lines 4-8» where the second internet protocol take the form of http messages to the end user]. *Fan* does disclose that the device sends messages to the first computer [column 5 «lines 3-11»] but *Fan* does not expressly disclose the message comprises an Internet electronic mail message. Sending emails containing status information from a monitored device to a monitoring device is well known in the art. *Fan* describes a pushing based method of sending messages whereby the printer initiates the process of sending status information to a supervising computer [column 5 «lines 3-14»].

It would have been obvious to one of ordinary skill in the art to have implemented email into *Fan* because email is a well known push-based messaging system. Email functionality has several benefits including the ability submit usage information when no response is required from the receiving party.

Claim 23 is rejected for the same reasons set forth for claim 3.

### **Claims 4 and 24**

As to claim 4, *Fan* as modified by *White* discloses the transmitting step comprises: formatting the second device information into a format suitable for display on a web page [*White*, column 9 «lines 14-20»: use of a browser to view the resource usage monitoring

information implies that the monitoring information has been formatted for display on a web page]; and

receiving a request for transmission of the second device information to the second computer from the second computer [column 1 «lines 33-36»].

It would have been obvious to one of ordinary skill in the art to have modified *Fan* to include the feature of formatting the usage information for display on a web page as taught by *White*. Such a modification is a clear improvement to *Fan*'s system because it would allow users to remotely access the monitoring information using traditional browsers.

Claim 24 is rejected for at least the same reasons for claim 4.

#### **Claim 6**

*Fan* as modified by *White* discloses:

generating, by the first monitoring computer, the second device information to include summary information regarding usage of plurality of image printing devices [column 4 «lines 20-29 and 51-59» & *White*, Fig. 1a «items 16»];

wherein the step of transmitting the second device information from the first monitoring computer comprises transmitting, by the first monitoring computer, the second device information that includes the information regarding usage of the device to the second computer [column 4 «lines 20-29 and 51-59»].

#### **Claim 7**

*Fan* discloses each of the plurality of image printing devices is one of a printer, a copier, a multifunction device, and a facsimile machine [Figure 3 «item 250» | *White*, Fig. 1a «items 16»].

**Claims 21 and 25**

As to claim 21, *Fan* as modified by *White* discloses a method of monitoring a plurality of monitored devices communicatively coupled to a local network, comprising:

periodically receiving from the plurality of image printing devices at a monitoring site using a first internet protocol, first device information of the plurality of image printing devices by a service center computer that is remote from the plurality of image printing devices, wherein the first device information includes at least two of static, semi-static, and dynamic states of the image printing devices [column 5 «lines 1-26» : pulling based model and *White*, column 2 «lines 63-67» | column 7 «lines 22-30» | column 8 «lines 40-60»: the resource collector within the collection server collects and collates printer usage information];

storing, by the service center computer, the obtained first device information into a storage device [column 5 «lines 15-18» | Fig. 3: *Fan*'s supervisor computer reads on service center computer];

processing, by the service center computer, information in the storage device of the plurality of image printing devices monitored by the service center computer to generate a usage report for the plurality of image printing devices that includes status information of each of the plurality of image printing devices [Fig. 3 | column 4 «lines 49-62» : notifications on resource usage | column 5 «lines 45-59» where the notification includes both the first device information collected from the printer as well as stored information such as the email addresses of the administrator or end users who are to receive the notification | *White*, column 2 «lines 63-67» | column 7 «lines 22-30» | column 8 «lines 40-60»: the resource collector within the collection server collects and collates printer usage information]; and

transmitting the usage report, using a second Internet protocol, from the service center computer to a second computer [column 4 «lines 49-62»]

As indicated in the foregoing mapping, *Fan* does not expressly disclose processing stored information of the plurality of image printing devices to generate second device information that includes status information of each of the plurality of image printing devices. However, this feature was well known in the art at the time of Applicant's invention as evidenced by *White* for the reasons discussed in the rejection of claim 1.

As to claim 25, as it does not teach or further define over previously claimed limitations, it is similarly rejected for at least the same reasons set forth for claim 21.

#### **Claim 22**

*Fan* as modified by *White* discloses transmitting the usage report from the service center computer to the second computer as an e-mail message, wherein said email message is transmitted at an application layer [column 4 «lines 59-62»].

#### **Claims 29 and 30**

These do not teach or further define over previously claimed limitations, they are similarly rejected for at least the same reasons set forth for claims 1, 21, and 25.

#### **Claims 31 and 32**

*Fan* as modified by *White* discloses the network is either a wide area or local area network [*White*, column 3 «lines 26-28»].

#### **B. Claims 2 and 5 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Fan* and *White*, in further view of *Sekizawa*, U.S. Patent No. 6,430,711.**

All citations are to *Fan* unless otherwise noted.

## **Claim 2**

*Fan* does not expressly disclose the first Internet protocol and the second Internet protocol are a same Internet protocol. However, such a feature was well known in the art at the time of Applicant's invention. In the same field of invention as *Fan*, *Sekizawa* discloses an invention for obtaining status information indicating the state of network printers connected to a network. However, *Sekizawa* improves *Fan*'s system by disclosing that the status information is emailed from the printer to a first monitoring computer [*Sekizawa*, column 4 «lines 6-17» : printer transmits status information to a mail server] and emailed from the first computer to a second computer [*Sekizawa*, column 6 «lines 9-17» : retrieving the email from the first computer]. This email functionality is an improvement over *Fan*'s system because "it is not necessary to establish connection each time the status-information is exchanged" and therefore the second computer "can smoothly get the status information" [*Sekizawa*, column 4 «lines 17-21»].

## **Claim 5**

As to claim 5, *Fan* discloses the second device information comprises an Internet electronic mail message [column 4 «lines 59-62»]. *Fan* does not expressly disclose the message comprises an Internet electronic mail message. However, as discussed with respect to claim 2, *Sekizawa* does disclose utilizing email messages as a means for transmitting status information. Sending emails containing status information from a monitored device to a monitoring device is well known in the art. This email functionality is an improvement over *Fan*'s system because "it is not necessary to establish connection each time the status-information is exchanged" and

therefore the second computer "can smoothly get the status information" [*Sekizawa*, column 4 «lines 17-21»].

## **VI. CONCLUSION**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DOHM CHANKONG whose telephone number is (571)272-3942. The examiner can normally be reached on Monday to Friday [10 am - 6 pm].

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thu Nguyen can be reached on (571)272-6967. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/DOHM CHANKONG/  
Primary Examiner, Art Unit 2452